

Applicant Serial No: _____
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Heat Exchange Compressor

Attorney's Docket No: ABI002PU
Art Unit _____
Examiner _____

ABSTRACT

An apparatus and process for simultaneously compressing liquids and gases and exchanging the heat of compression with fluids which may be the same liquids and gasses compressed. An apparatus and process for heating maintenance fluids using heat generated when the lift gas is compressed. The compressor may be used for recovering oil and gas from a subterranean formation wherein the production rate is controlled by the gas pressure at the well head, resulting in very slow strokes or pulses and bubbles of lift gas 500 feet long or longer. It may also be used for well maintenance using cooled injection gas from the well and heated fluids, which also may come from the well and be mixed with the well gas during compression, may be conducted without interrupting production.